

GROUND-WATER LEVELS

CITY OF NEWPORT NEWS

371027076335601. Local number, 58F 1 SOW 002.

LOCATION.--Lat 37°10'28", long 76°33'55", NAD83, Hydrologic Unit 02080206, on shore of Lee Hall Reservoir, 0.15 mi north of intersection of State Highway 105 and U.S. Highway 60, and 0.65 mi northeast of Fort Eustis in Newport News. Owner: City of Newport News.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 431.3 ft, diameter 8 in. from 431.3 to 443 ft, diameter 6 in. from 443 to 497 ft, depth 497 ft, screened 476 to 493 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

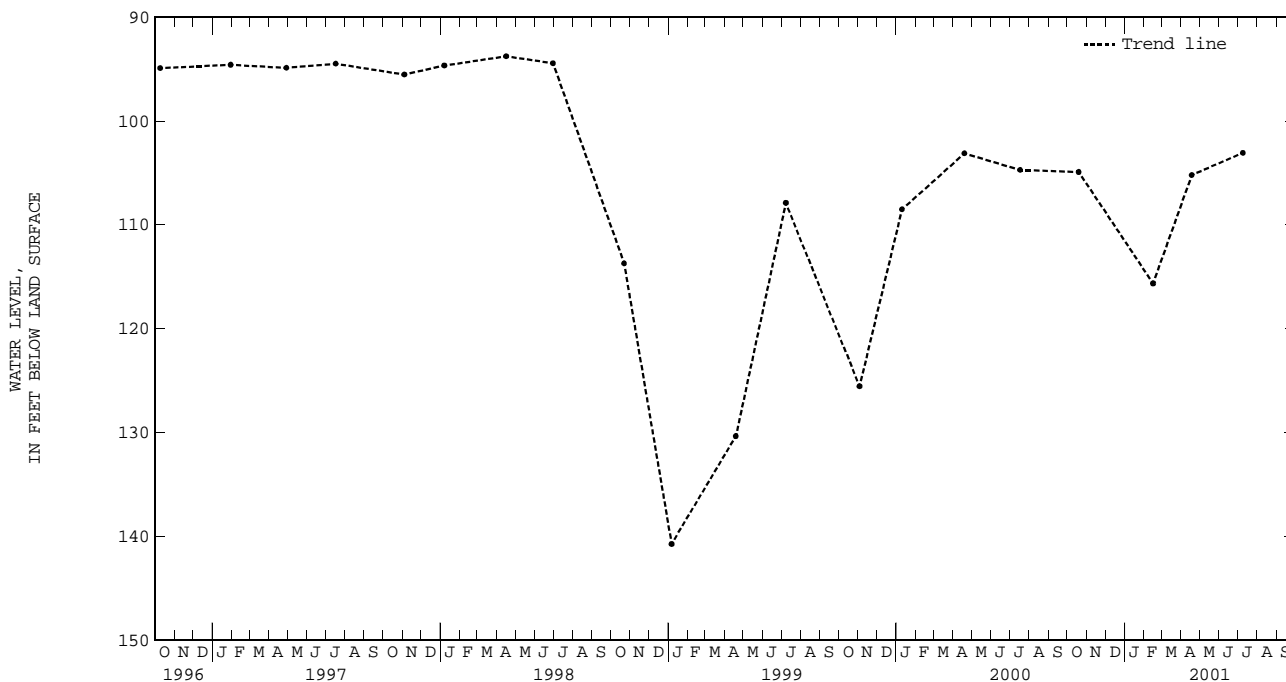
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--January 1968 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.76 ft below land-surface datum, May 10, 1969; lowest measured, 140.75 ft below land-surface datum, Jan. 6, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	104.91	FEB 15	115.64	APR 18	105.20	JUL 09	103.07
WATER YEAR 2001		HIGHEST	103.07	JUL 09, 2001		LOWEST	115.64
		FEB 15, 2001					



GROUND-WATER LEVELS

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CITY OF NEWPORT NEWS

371208076341101. Local number, 58F 50 SOW 171A.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,236 ft, screened 1,205 to 1,215 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to May 8, 1997, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.85 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

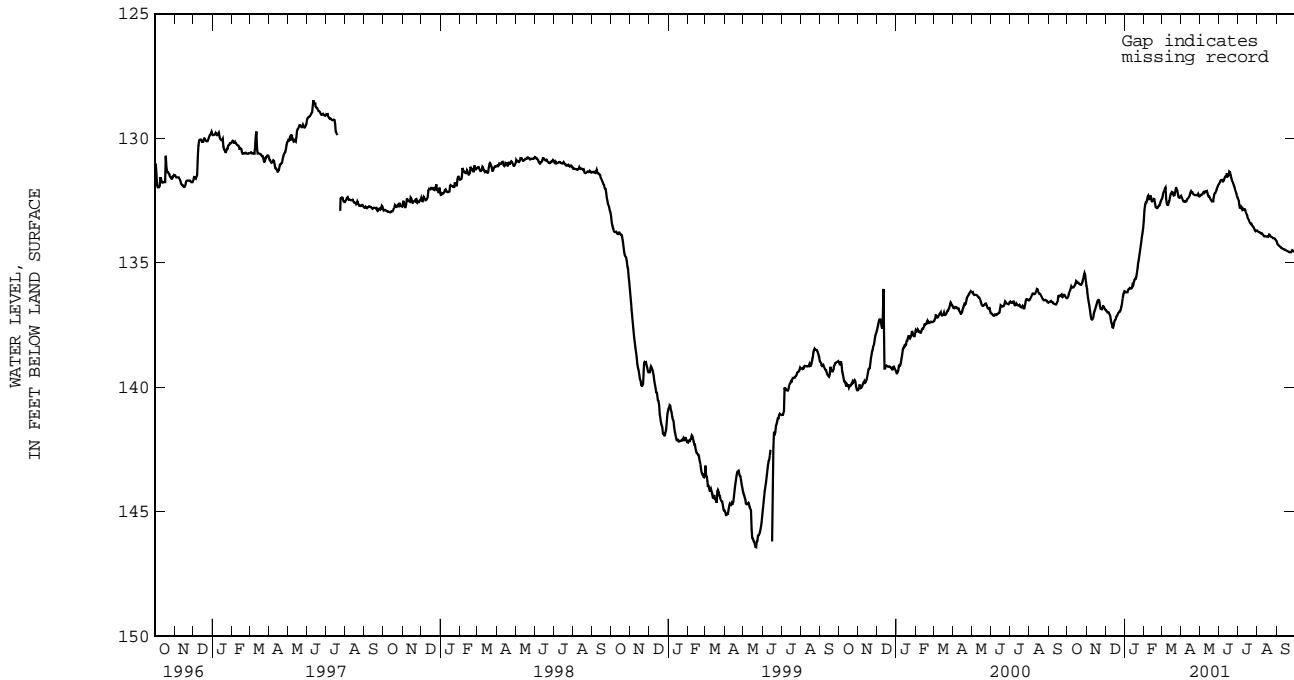
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 106.32 ft below land-surface datum, May 23-27, 1996; lowest recorded, 146.42 ft below land-surface datum, May 21, 1999.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 131.16 ft below land-surface datum, Jun. 17; lowest instantaneous water level, 137.61 ft below land-surface datum, Dec. 19.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	136.12	136.72	136.99	136.18	132.51	132.12	132.55	132.24	131.68	132.81	133.79	134.32
10	135.99	137.28	137.42	136.03	132.36	132.67	132.46	132.14	131.55	132.87	133.88	134.43
15	135.73	136.79	137.37	135.78	132.50	132.25	132.28	132.34	131.52	133.08	133.95	134.50
20	135.86	136.51	137.11	135.37	132.79	132.30	132.22	132.53	131.58	133.40	133.87	134.57
25	135.75	136.88	136.88	134.53	132.70	132.03	132.28	132.21	131.96	133.54	133.99	134.55
EOM	135.94	136.86	136.14	133.33	132.49	132.33	132.34	131.86	132.39	133.70	134.11	134.58



GROUND-WATER LEVELS

CITY OF NEWPORT NEWS

371208076341102. Local number, 58F 51 SOW 171B.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 851 ft, screened 820 to 830 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to Apr. 24, 1996, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.80 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

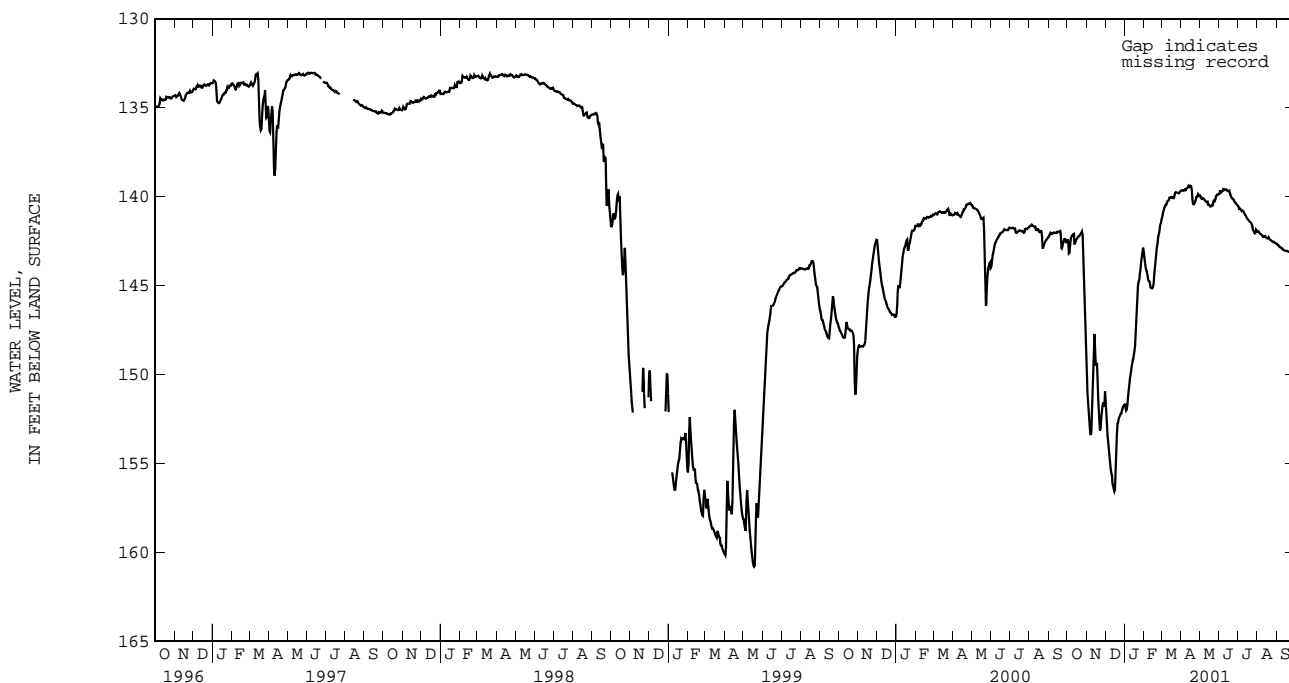
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 126.35 ft below land-surface datum, Mar. 23-25, 1985; lowest recorded, 160.80 ft below land-surface datum, May 18, 1999.

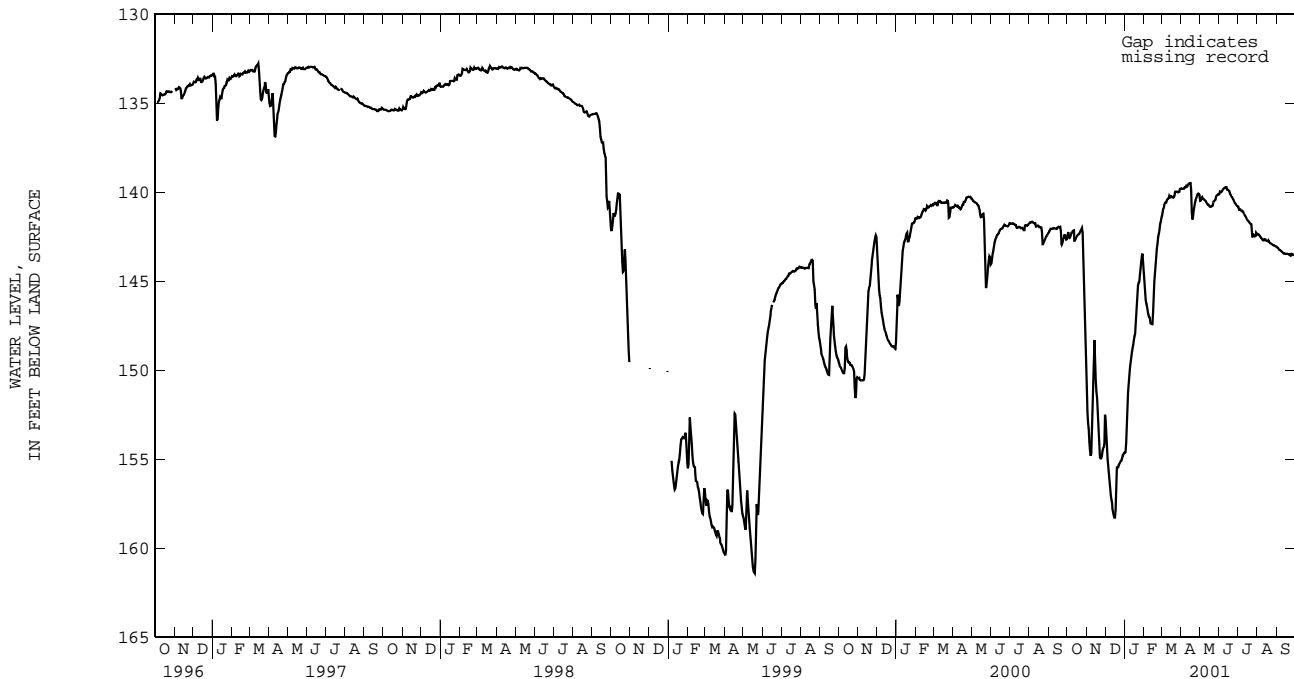
EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 139.25 ft below land-surface datum, Apr. 16; lowest instantaneous water level, 156.55 ft below land-surface datum, Dec. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	142.69	152.64	153.82	151.68	144.26	140.66	139.67	140.08	139.73	140.68	142.08	142.80
10	142.11	150.53	155.57	149.95	144.96	140.30	139.54	140.24	139.60	140.84	142.25	142.93
15	142.43	149.43	156.55	148.88	145.08	140.06	139.47	140.45	139.71	141.19	142.29	143.07
20	142.23	152.05	152.78	145.81	143.20	140.09	140.43	140.50	140.00	141.43	142.35	143.09
25	142.15	152.15	152.20	144.31	141.94	139.78	140.03	140.25	140.24	141.85	142.54	143.06
EOM	149.57	150.94	151.69	143.11	141.34	139.68	139.94	139.89	140.49	141.92	142.63	143.17



371208076341103. Local number, 58F 52 SOW 171C.



GROUND-WATER LEVELS

CITY OF NEWPORT NEWS

371208076341104. Local number, 58F 53 SOW 171D.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 343 ft, screened 333 to 343 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 2.9 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.18 ft below land-surface datum, Feb. 2, 1985; lowest recorded, 65.54 ft below land-surface datum, Aug. 29, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	64.93	DEC 19	64.87	MAR 01	65.19	APR 24	65.19	JUN 12	65.37	AUG 29	65.54
WATER YEAR 2001		HIGHEST	64.87	DEC 19, 2000	LOWEST	65.54	AUG 29, 2001				



CITY OF NEWPORT NEWS

371208076341105. Local number, 58F 54 SOW 171E.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 88 ft, screened 78 to 88 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch. Digital recorder was removed from Oct. 18, 1991 to Jul. 8, 1992. During this period, occasional measurements with chalked tape.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Jul. 8, 1992; 1.6 ft thereafter.

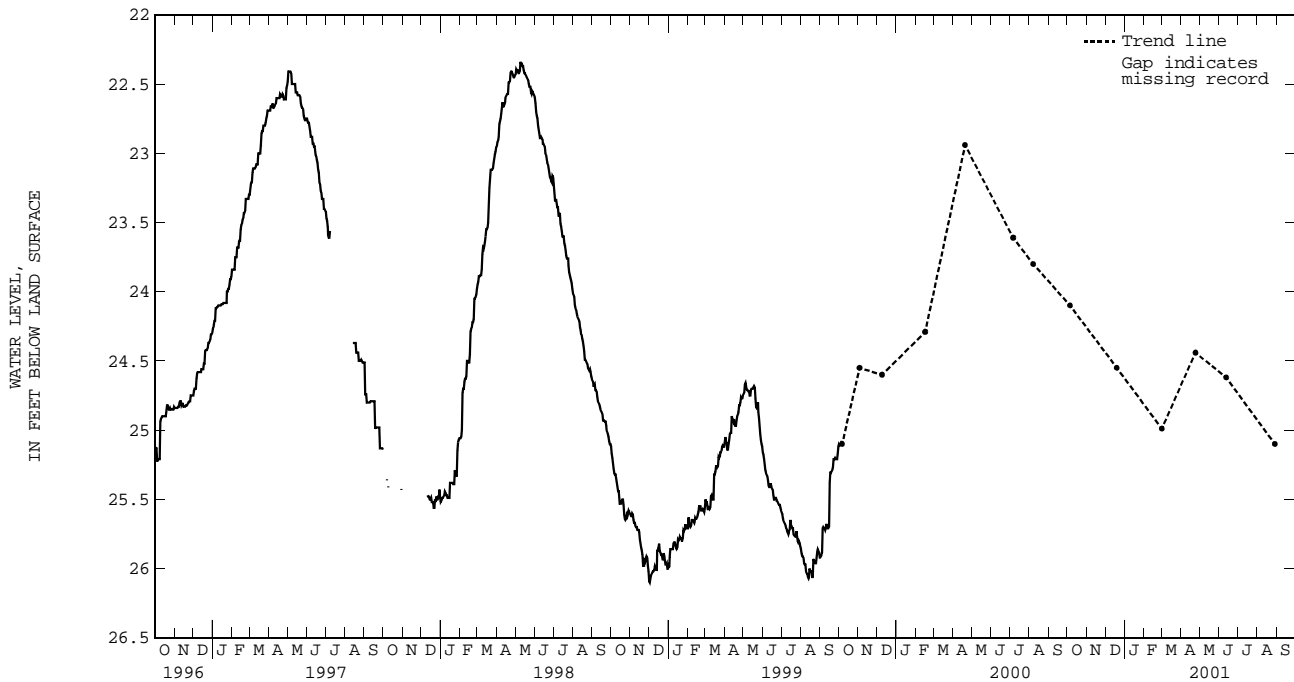
REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling. Occasional stepping in hydrograph due to well not being plum and float rubbing the side of the casing.

PERIOD OF RECORD.--June 1984 to October 1991, July 1992 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.05 ft below land-surface datum, May 20, 21, 1993; lowest recorded, 27.34 ft below land-surface datum, Nov. 1, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	24.10	DEC 19	24.55	MAR 01	24.99	APR 24	24.44	JUN 12	24.62	AUG 29	25.10
WATER YEAR 2001		HIGHEST	24.10	OCT 05, 2000	LOWEST	25.10	AUG 29, 2001				



GROUND-WATER LEVELS

CITY OF NEWPORT NEWS

371208076341106. Local number, 58F 55 SOW 171F.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above sea level, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.04 ft below land-surface datum, May 21-24, 1993; lowest recorded, 29.12 ft below land-surface datum, Oct. 29, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	26.28	DEC 19	26.88	MAR 01	26.93	APR 24	26.15	JUN 12	26.70	AUG 29	27.49
WATER YEAR 2001		HIGHEST	26.15	APR 24, 2001		LOWEST	27.49	AUG 29, 2001			

